



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/956,954	09/21/2001	Walter Etter	Etter 4/AGER027	2462
47549	7590	06/08/2005	EXAMINER	
PRIEST & GOLDSTEIN, PLLC 5015 SOUTHPARK DRIVE SUITE 230 DURHAM, NC 27713				JAMAL, ALEXANDER
ART UNIT		PAPER NUMBER		
		2643		

DATE MAILED: 06/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No.	Applicant(s)	
	09/956,954	ETTER, WALTER	
	Examiner	Art Unit	
	Alexander Jamal	2643	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 03 May 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

a) The period for reply expires 3 months from the mailing date of the final rejection.
 b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) They raise the issue of new matter (see NOTE below);
 (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. Applicant's reply has overcome the following rejection(s): _____.

6. Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. For purposes of appeal, the proposed amendment(s): a) will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: 2-21.

Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. The request for reconsideration has been considered but does NOT place the application in condition for allowance because:

see attached sheet for response to arguments.

12. Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____

13. Other: Examiner notes Interview Summary (PTOL-413) included with this action.


 CURTIS KUNTZ
 SUPERVISORY PATENT EXAMINER
 TECHNOLOGY CENTER 2600

Response to Arguments

1. Applicant's arguments filed 5-3-2005 have been fully considered but they are not persuasive.

As per applicant's argument concerning the Matt reference not utilizing a near end noise level estimator (remarks pages 9-10). Matt detects the long and short term average values of the near end transmitting signal $x(k)$ (Fig. 2a). The long term average value for $x(k)$ is used as a reference to compare the short term value of $x(k)$ to differentiate speech from ambient noise. Examiner reads the long-term average as a 'near-end' noise estimate (Col 5 line 55 to Col 6 line 24). This comparison is used to enable the estimation of coupling factor dll , which allows the production of a control signal 'thrs' which is used to vary the compression range as shown in Fig. 3a, by the use a signal US (Matt: Col 7 lines 15-30). Additionally, the coupling estimate is used in conjunction with the near and far end signals to estimate the near end echo. Examiner reads the near end echo as 'near end noise'. This estimate is used in producing the control signal 'thrs', that is used to vary the compression range as mentioned above.

As per applicant's arguments that Matt does not disclose a 'compression range' that is adaptively varied to compensate for near end noise estimate (remarks pages 10-11), examiner contends that the characteristic shown in Fig. 3a does show a compression range (located within $p2$ and $p3$). Every input signal above that point will be compressed to a lower level. Examiner notes that applicant's specification would read a portion of the transitional stage ($p2-p3$ in Matt Fig. 3a) as a compression range, and labels the compression range a 'limiter' range (applicant's spec Fig. 2). Since the 'limiter' range is

still compressing the signal, examiner notes that the limiter range could be considered a 'compression range'. Examiner further notes that Matt does disclose a linear range between p2 and p3 in Fig. 3a (even further supported by Fig. 3c). Applicant's independent claim 21 claims 'adaptively adjusts a far end signal compression range based on the near end noise level estimate'. Examiner contends that Matt's device 'adaptively adjusts' the compression range by shifting the compander characteristic. Even if applicant were only referring to a portion of the transitional area between p2 and p3 (Matt: Fig. 3a) as a 'compression range', then that range would still be 'varied' because it is shifted and the beginning and endpoints of that range have been varied. Examiner further contends that the compander characteristic (including the compression range) is varied in Matt for the purpose of compensating for near end noise (echo 4.1, 6.1 in Matt: Fig. 2b). Examiner further contends that Matt's compander compensates for the near end ambient noise because the ambient noise will be included with the voice signal when the near end speaker is talking, and that speech+noise will be used to derive the coupling factor that will be used to vary the compression range as mentioned above.



CURTIS KUNTZ
SUPPLYING PATENT EXAMINER
ACGTY CENTER 2600